



# MUNICIPALITY OF WEST GREY

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## Municipal Landfill Review





# OVERVIEW

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1. Landfill Capacities
2. Annual Monitoring Report (AMR) review
3. Capping and Closure Plans
4. Transfer Station discussion
5. Landfill Future Needs Discussion

# GLENELG LANDFILL – Capacity & AMR Review

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- MOE Certificate Approval No. A261803
- Landfill is Closed
- 0.48 ha licensed fill area
- Volume of waste and cover previously landfilled= 20,000 m<sup>3</sup>
  - Including final cover
- Landfill was capped in 2007, final cover applied in 2008.
  
- Based on the Annual Monitoring data, there continues to be little to no evidence of off-site leachate impacts.
- It has been recommended that consideration be given to reducing the annual monitoring and reporting to a frequency of once every 5-years.
  - Recommendation awaiting MECP Approval and Authorization



# NEUSTADT LANDFILL – Capacity & AMR Review

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- MOE Certificate Approval No. A2610-01
- 0.45 ha licensed fill area
- Landfill was closed and capped in 1992.
  
- Based on the Annual Monitoring data, there continues to be little to no evidence of off-site leachate impacts.
- It has been recommended that consideration be given to reducing the annual monitoring and reporting to a frequency of once every 5-years.
  - Recommendation awaiting MECP Approval and Authorization



# NORMANBY LANDFILL – Capacity & AMR Review

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- MOE Certificate Approval No. A262104
- 2.8 ha licensed fill area
- Landfill is Closed
- Approved Airspace Capacity = 69,000 m<sup>3</sup>
  - Including final cover
- Site has reached maximum capacity, waste placement has been discontinued.
- Closure and capping of the site is being coordinated by the Municipality.
- The analytical results at the Site indicate that there is currently no apparent impact to the groundwater migrating away from the subject property above the Reasonable Use Criteria.



# NORMANBY LANDFILL – Transfer of Waste

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- Current ECA does not include the approved operation of the Site to act as a transfer station.
  - Transfer Station approval would require relatively basic ECA Amendment
- Should the Municipality choose to use the Site as a waste transfer station, a site plan and supporting documents for a waste transfer station would need to be completed and submitted to the MECP for approval.



# DURHAM LANDFILL - Capacity

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- MOE Certificate of Approval No. A260202
- 4.2 ha licensed fill area
- Approved Airspace Capacity = 207,000 m<sup>3</sup>
  - Including final cover
- Remaining Capacity = 18,950m<sup>3</sup> (2020)
  - Remaining Capacity **Only includes for final cover**
- Estimated site life  $\approx 0$
  
- Closure Plan currently being completed by GMBP for submission to the MECF



# DURHAM LANDFILL – AMR Review

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- The Municipality has prepared for closure of the Site with transfer of waste to the approved Bentinck waste disposal site.
- Based on Annual Monitoring data, consideration should be given to obtaining an agreement with landowner(s) situated to the west of the landfill property to register a portion of their property as a contaminant attenuation zone (CAZ).
- Based on previous MECP recommendations, an evaluation of the Caswell and Martin's Plastic domestic wells is recommended.





# DURHAM LANDFILL – Transfer of Waste

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## Condition 10

(4) The Owner shall transfer **waste and recyclable** materials from the Site as follows:

- (a) recyclable materials shall be transferred off-site once their storage bins are full;
- (b) scrap metal shall be transferred off-site at least twice a year;
- (c) tires shall be transferred off-site as soon as a load for the contractor hired by the Owner has accumulated or as soon as the accumulated volume exceeds the storage capacity of its bunker; and
- (d) immediately, in the event that waste is creating an odour or vector problem.

(5) The Owner shall notify the appropriate contractors that **waste and recyclable wastes** that are to be transferred off-site are ready for removal. Appropriate notice time, as determined by the contract shall be accommodated in the notification procedure.



# BENTINCK LANDFILL – Capacity

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- MOE Certificate of Approval No. A261301
- 20.2 ha licensed fill area
- Approved Airspace Capacity = 227,400 m<sup>3</sup>
  - Excludes final cover and capping
- Remaining Capacity = 198,701 m<sup>3</sup> (2020)
  - Includes waste, daily and final cover
- Estimated site life  $\approx$  40 years (at 5 year average fill rate)
  
- Recommendation for annual topographic survey to be completed at the site – including Fall of 2021 to confirm landfilling rate and remaining capacity.



# BENTINCK LANDFILL – AMR Review

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- To accurately document the volumes of waste placed, the fill rates, and remaining site life, it is recommended to layout new trenches and to survey the bottom elevations of the trench prior to placement of waste.
- The progression of waste placement is moving from the previous sub-surface trenching method, to above grade ramp and fill methodology on top of the completed trenches.
- Further investigation into the condition of monitoring well TP-3. If the well cannot be repaired it is recommended that the well be removed from the monitoring program and be decommissioned.



# LANDFILL NEEDS DISCUSSION

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- Future Needs at each Landfill Site dependent on Long Term Waste Management Plan for each respective facility,
- Bentinck Landfill will become the primary Waste Disposal Site servicing entire Municipality,
  - This allows for a focus of personnel and financial investment into a single operating facility

## Example Needs:

- Transfer of waste out of other Sites into Bentick – Construct approved Transfer Stations where required
- Closure and capping of Closed Sites as per approved Closure Plans (*Closure Plan for Durham being Completed*)



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QUESTIONS AND COMMENTS?